

THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Previously Presented) A system for establishing a dedicated channel to transport IP encapsulated ATM cells from one ATM network associated with a source gateway to another ATM network associated with a destination gateway over an IP backbone network, the system comprising:
 - a source gateway interconnected to the IP backbone network, said source gateway operable to:
 - transmit an IP signaling message requesting an IP address of a proper destination gateway to a controller upon receipt of an ATM signaling message from an ATM end point;
 - receive the IP address from the controller confirming the address of the proper destination gateway from the controller;
 - transmit an address registration message to the controller to register the source gateway;
 - exchange set-up messages with the proper destination gateway to transport IP encapsulated ATM cells associated with a call; and
 - transmit an open logical channel request message to the controller to request the establishment of a dedicated channel between the source gateway and the destination gateway to transport IP encapsulated ATM cells.

2. (Cancelled)

3. (Previously Presented) The system of claim 1 wherein the ATM signaling message is an ATM UNI signaling message.

4. (Previously Presented) The system of claim 1 wherein the IP signaling message follows the H.323 protocol.

5. – 14. (Cancelled)

15. (Previously Presented) The method of claim 30 wherein the step of receiving the IP address from the controller is performed via a H.323 protocol message.

16. (Cancelled)

17. (Previously Presented) The method of claim 30 wherein the set-up messages use a Q.2931 signaling format.

18. – 23. (Cancelled)

24. (Previously Presented) A system for establishing a dedicated channel to transport IP encapsulated ATM cells from one ATM network

associated with a source gateway to another ATM network associated with a destination gateway over an IP backbone network comprising:

- a destination gateway interconnected to the IP backbone network, said destination gateway operable to;

- transmit an automatic retransmission request to a controller to register the destination gateway and to determine whether the destination gateway may receive IP encapsulated ATM cells associated with a call from a source gateway;

- receive a confirmation message from the controller confirming the destination gateway may receive the ATM cells;

- exchange set-up messages with a source gateway to transport IP encapsulated ATM cells over the IP backbone network;

- transmit an open logical channel request message to the controller to open a dedicated channel between the destination gateway and the source gateway;

- transmit an alert message to the source gateway to inform the source gateway that an ATM endpoint has been alerted about the call; and

- transmit a call proceeding message to the source gateway.

25. (Previously Presented) A system for establishing a dedicated channel to transport IP encapsulated ATM cells from one ATM network associated with a source gateway to another ATM network associated with a destination gateway over an IP backbone network comprising:

a controller interconnected to the IP backbone network, said controller operable to;

transmit an IP address of a proper destination gateway to a source gateway using an IP signaling message;

receive an address registration message from the source gateway to register the source gateway and an automatic retransmission message from the destination gateway to register the destination gateway; and

transmit acknowledgements to the source and destination gateways to acknowledge the opening of a logical channel between the source and destination gateways in response to receiving one or more open logical channel request messages.

26. – 29. (Cancelled)

30. (Previously Presented) A method for establishing a dedicated channel to transport IP encapsulated ATM cells from one ATM network associated with a source gateway to another ATM network associated with a destination gateway over an IP backbone network comprising:

transmitting an IP signaling message requesting an IP address of a proper destination gateway to a controller upon receipt of an ATM signaling message from an ATM end point;

receiving the IP address of the proper destination gateway from the controller;

transmitting an address registration message to the controller to register a source gateway;

exchanging set-up messages between the source gateway and the proper destination gateway to transport IP encapsulated ATM cells associated with a call; and

transmitting an open logical channel request message to the controller to request the establishment of a dedicated channel between the source gateway and the destination gateway to transport encapsulated ATM cells.

31. (Previously Presented) A method for establishing a dedicated channel to transport IP encapsulated ATM cells from one ATM network associated with a source gateway to another ATM network associated with a destination gateway over an IP backbone network comprising:

transmitting an automatic retransmission request to a controller to register a destination gateway and to determine whether the destination gateway may receive IP encapsulated ATM cells associated with a call from a source gateway;

receiving a confirmation message from the controller confirming the destination gateway may receive the ATM cells;

exchanging set-up messages between a source gateway and the destination gateway to transport IP encapsulated ATM cells over the IP backbone network;

transmitting an open logical channel request message to the controller to open a dedicated channel between the destination gateway and the source gateway;

transmitting an alert message to the source gateway to inform the source gateway that an ATM endpoint has been alerted about the call; and

transmitting a call proceeding message to the source gateway.

32. (Previously Presented) A method for establishing a dedicated channel to transport IP encapsulated ATM cells from one ATM network associated with a source gateway to another ATM network associated with a destination gateway over an IP backbone network comprising:

transmitting an IP address of a proper destination gateway to a source gateway using an IP signaling message;

receiving an address registration message from the source gateway to register the source gateway and an automatic retransmission message from the destination gateway to register the destination gateway; and

transmitting acknowledgements to the source and destination gateways to acknowledge the opening of a logical channel between the source and destination gateways in response to receiving one or more open logical channel request messages.